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### **REMARKS**

Applicant responds herein to each of the issues raised in the Office Action. Applicant submits the present application is in form for allowance for the reasons discussed below.

#### **Interview Summary:**

Applicant appreciates the courtesy extended by the Examiner in the telephonic interview of April 25, 2007. During the interview, the arguments regarding the very broad interpretation given by the Examiner to the claims as amended by the RCE was discussed and the distinction between a varactor and a capacitor was discussed, generally along the lines of the comments detailed below. The Examiner indicated he would further consider, in light of these comments, whether he had any suggested amendments to expedite prosecution by placing this case in form for allowance. In light of the lack of response from the Examiner and the deadline for response, Applicant submits the present responsive amendment. Applicant submits that the language included in the newly added dependent Claims 32-34 clearly makes the overly broad interpretation of the language added by the RCE unsupportable and Applicant particularly requests that the Examiner closely consider whether this language would be sufficient to address the Examiner's concern about the scope of the pending claims.

#### **The Prior Art Rejections:**

Claims 1, 3, 5, 8, 11, 14-16, 23-25 and 28-29 stand rejected as anticipated under 35 U.S.C. § 102 in light of United States Patent No. 5,739,730 to Rotzoll ("Rotzoll"). Office Action, p. 2. Claims 1-31 stand rejected as obvious under 35 U.S.C. § 103 in light of United States Patent Application Publication No. 2003/0048145 to Albon *et al.* ("Albon") in view of United States Patent No. 5,648,744 to Prakash *et al.* ("Prakash") and further in view of Rotzoll. Office Action, p. 4. These rejections are substantially unchanged from the previous action. Accordingly, Applicant will only address the newly raise matters herein to expedite reconsideration of the rejections by the Examiner. However, to assure that this amendment is

considered fully responsive to the Final Action, Applicant's previous amendments are incorporated herein by reference in their entirety.

As an initial matter, Applicant submits the claims are allowable at least for the previously presented reasons related to the distinctions between varactors and capacitors, which are separately recited in each of independent Claims 1, 11, 14 and 23. In the Response to Arguments section, the assertion is made that "Applicant again tries to persuade the examiner that a capacitor does [sic] cannot include a varactor. The examiner again respectfully disagrees for a varactor is a special form of capacitor." Office Action, p. 8. The Applicant does not and has never asserted a varactor is not a type of capacitor. The Applicant does argue, however, that a capacitor is not a type of varactor. The Applicant further argues that it is an unreasonably broad interpretation to assert that a claim reciting **both** a plurality of switched capacitors and a separate plurality of switched varactors is broad enough to cover a circuit with nothing but a plurality of switched capacitors, merely because a varactor is a type of capacitor. More particularly, the Applicant stated the following in a previous amendment:

In the Response to Arguments section, the Final Action characterizes the Applicant's argument that a "varactor is not meant by a capacitor" as not persuasive as no "negative limitation" is "placed in the claims." Final Action, p. 7. Applicant wishes to correct any confusion by noting that Applicant's arguments are not based on asserting that a varactor is not a capacitor, as a varactor is, essentially, a variable capacitor, but on the assertion that a capacitor is not a varactor if it is not variable "responsive to an applied control voltage" as recited, for example, in Claim 1.

September 26, 2006 Amendment, pp. 10-11. Each of the independent claims includes recitations related to both switched varactors and switched capacitors. Accordingly, the rejections should be withdrawn for at least these reasons.

The rejections also vary from the previous rejections based on the amendments submitted with the RCE. The added recitations are characterized in the Office Action as "very broad for the control circuit of the prior art does select the switches [sic] control the switches based [sic] the signals supplied to the switches." Office Action, p. 3; *see also*, pp. 7-8. Applicant submits such an interpretation, as understood by Applicant is unreasonably broad as, regardless of whether the prior art selects multiple switch outputs to obtain a desired

result, such does not mean one such output is based on another such output merely because both a determined based on a desired resultant capacitance characteristic. In other words, the recitation of, for example, Claim 1 that "the selected ones of the varactors of the switched varactor circuit are selected based on signals supplied to switches of the switched capacitor circuit" is not disclosed or suggested by a circuit that happens to select both switched varactors and switched capacitors to establish a desired capacitance. Furthermore, as discussed above, the cited art fails to even disclose separate banks of varactors and capacitors, nonetheless selection of ones of the varactors based on signals supplied to the bank of capacitors. Accordingly, the rejections of Claim 1 and the claims that depend therefrom should also be withdrawn for at least these reasons.

Independent Claims 11, 14 and 23 include corresponding recitations. Accordingly, the rejections of these claims and the claims that depend therefrom should also be withdrawn for at least substantially similar reasons.

The Office Action further suggests adding "more specific language" to obtain a less broad interpretation of the independent claims. Applicant submits such additional language is not required for the reasons discussed above. However, new Claims 32-34 include further structural recitations specific to the embodiments illustrated in Figure 8 of the present application, which claims depend, respectively on independent Claims 1, 11 and 14.

Applicants further note that, while recited in Claims 32-34, and the independent Claims 1, 11 and 14 to cover embodiments where separate or shared switches may be provided for the varactor and capacitor units, independent Claim 23 particularly recites a shared switch. In particular, Claim 23 recites "a plurality of capacitors of a switched capacitor unit connected to **a plurality of switched digital switches** ... a plurality of varactors of a switched varactor unit connected to **the switched digital switches**." Thus, Claim 23 recites embodiments where the varactor selection is based on the signals supplied to the capacitor circuit by using the same switches to select respective ones of the varactors and capacitors. Accordingly, Claims 32-34 and 23 are also separately patentable for at least these reasons. The separate patentability of other of the claims will not be addressed herein but the

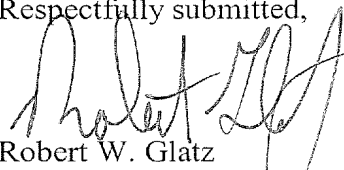
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arguments previously presented by the Applicant for separate patentability are incorporated herein by reference.

### CONCLUSION

Applicant respectfully submits that, for the reasons discussed above and in the previous amendments, the references cited in the present rejections do not disclose or suggest the present invention as claimed. Accordingly, Applicant respectfully requests allowance of all the pending claims and passing this application to issue.

Respectfully submitted,



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